



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/723,264

11/26/2003

Stephen E. Gray

36287-4404

8757

28221 7590 07/22/2009  
PATENT DOCKET ADMINISTRATOR  
LOWENSTEIN SANDLER PC  
65 LIVINGSTON AVENUE  
ROSELAND, NJ 07068

EXAMINER

TROTTER, SCOTT S

ART UNIT

PAPER NUMBER

3694

MAIL DATE

DELIVERY MODE

07/22/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/723,264	<b>Applicant(s)</b> GRAY ET AL.	
	<b>Examiner</b> SCOTT S. TROTTER	<b>Art Unit</b> 3694	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-16, 18, 19 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-16, 18, 19 and 21-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Response to Arguments***

1. All of the applicant's arguments were considered but were not persuasive. Most of the disagreement seems to be coming from differences of claim interpretation so a section explaining the examiner's interpretation was added below.

***Claim Interpretation***

2. The reason employee options are not traded is because employers include restrictions against trading them. If there is no such restriction in an option contract it is like the other option contracts discussed in Sullivan that have a long history of being traded without being exercised first. While a restriction that only allowed them to be traded under these conditions may be novel it is not statutory since the only novelty would be in the contract conditions not in the method of trading options.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-14 and 23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Based on Supreme Court precedent (*Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876) and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or

Art Unit: 3694

materials) to a different state or thing. (The Supreme Court recognized that this test is not necessarily fixed or permanent and may evolve with technological advances.

Gottschalk v. Benson, 409 U.S. 63, 71 (1972)) If neither of these requirements is met by the claim, the method is not a patent eligible process under § 101 and should be rejected as being directed to nonstatutory subject matter. In this case there is neither a particular apparatus or a physical transformation. A “computer system” is not inherently a structure since it could refer to simply software. (Please simply add a processor or other hardware as part of the computer system and cite to where it appears in the specification or a figure for this point but that doesn’t help with the next one.) As for “using the computer system” for X that appears like it could be simply **data gathering** which extra solution activity which does not make a process patent eligible under Bilski pages 26-27 {United States Court of Appeals for the Federal Circuit 2007-1130 (Serial No. 08/833,892) IN RE BERNARD L. BILSKI and RAND A. WARSAW} (If the citation is not in a proper form since the examiner used a pdf of how the opinion appeared on the Federal Circuits website a search for the term "data gathering" in the Bilski opinion will find the relevant passage.) More detail making clear that it is not simply displaying some data with all of the work being done by someone in their head would help with this point.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-10, 12-16, 18, 19, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan in view of Official Notice.

As per claim 1 the trading of options is taught by Sullivan. (*see column 2 lines 46-62*) The listed variety can be traded at anytime that an exchange is open from issuance until expiration of the option. "American style" options can also be executed at any time up until expiration. As for decision periods an option can be transferred anytime after it is issued giving an infinite number of decision periods. The values offered for the options are the values offered by the market which are determined by what the buyers think the options are worth.

Sullivan doesn't explicitly teach electing transfer of an employee stock option during a particular decision period; and executing an order for transfer of the employee stock option after the particular decision period. But Official Notice is taken that it is old and well known in the art of brokerage services to place limit orders and orders at the opening price. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to place an order that would not be executed until the next day which would be after a particular decision period.

As per claims 2, 3, 4, 12, 13, and 14 Sullivan teaches the trading of stock options but does not explicitly address prorating trades Official Notice that partial executions are old and well known in the art of trading therefore it would have been obvious to a person of ordinary skill in the art of trading options to only fill the part of the order that can be filled.

As per claim 5, 6, and 10 Sullivan teaches the method of claim 1 but does not explicitly teach using option pricing formulas to set option prices. But it is old and well known in the art of finance that option pricing formulas exist to show what an appropriate price would be for an option. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use option pricing models such as the Black-Scholes Model or the Binomial model (both of which were taught by Peter Hoadley's Option Strategy Analysis Tools disclosed in the January 9, 2004 IDS) to determine an appropriate price for an option.

As per claim 7 Sullivan teaches the method of claim 1 but does not explicitly teach using a pricing grid to provide a plurality of option value pricing. But it is old and well known in the art of presenting the results of mathematical equations to present them in a grid with a obvious example being logarithmic and trigonometric functions which were published in books rather than being recalculated by hand every time they were needed. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a pricing grid to convey the plurality of option value prices showing the results of the models in a convenient format.

As per claim 8 Sullivan teaches the method of claim 1 but does not explicitly teach determining an average stock trading price over a predetermined period of time. It is old and well known in the art of finance to track a **moving average** price of a security. Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a moving average of the stock to smooth out the volatility in the price swings over the time period.

As per claim 9 the use of a stock price at a predetermined period of time is a European style option that must be executed at one specific point in time. (see *Sullivan column 2 lines 46-49*)

As per claim 15 see the rationale for claim 1 as a parallel system claim to that method claim.

As per claim 16 see the rationale for claim 10 as a parallel system claim to that method claim.

As per claim 18 see the rationale for claim 1 as a parallel computer readable medium claim to that method claim.

As per claim 19 see the rationale for claim 1 as a parallel system claim to that method claim.

As per claim 21 see the rationale for claim 10 as a parallel computer readable medium claim to that method claim.

As per claim 22 see the rationale for claim 10 as a parallel system claim to that method claim.

As per claim 23 trades can take place between a wide variety of traders which would include individuals other than the employer. (see *Sullivan column 6 lines 13-26*)

### ***Conclusion***

6. Any inquiry concerning this communication from the examiner should be directed to Scott S. Trotter, whose telephone number is 571-272-7366. The examiner can normally be reached on 8:30 AM – 5:00 PM, M-F.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James P. Trammell, can be reached on 571-272-6712.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

9. The fax phone number for the organization where this application or proceeding is assigned are as follows:

(571) 273-8300 (Official Communications; including After Final  
Communications labeled "BOX AF")

(571) 273-6705 (Draft Communications)

sst  
7/22/2009



Application/Control Number: 10/723,264

Page 8

Art Unit: 3694

/James P Trammell/

Supervisory Patent Examiner, Art Unit 3694